UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/005,066	12/03/2001	Julie Anna Symons	10015520	9441

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EXAMINER
TRAN, NGHI V

ART UNIT	PAPER NUMBER
2151	

DATE MAILED: 04/20/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on _03 December 2001_.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) _1-34_ is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) _1-34_ is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
      application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____.

DETAILED ACTION

Specification

1.   The lengthy specification has not been checked to the extent necessary to

determine the presence of all possible minor errors. Applicant's cooperation is

requested in correcting any errors of which applicant may become aware in the

specification.

Claim Rejections - 35 USC § 102

2.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3.   Claims 1-4 and 10-12 are rejected under 35 U.S.C. 102(e) as being anticipated

by Sherer et al., U.S. Patent No. 6,115,376 (hereinafter Sherer).

4.   With respect to claim 1, Sherer teaches a method of managing a network [see

abstract and figs.1-4], said method comprising:

a) receiving a packet at a first port in said network [col.2, lns.54-65], wherein;

b) determining if an address associated with said packet is authorized [i.e authenticated] for said first port [col.4, lns.36-59]; and

c) forwarding said packet if said address is authorized [col.2, ln.54 - col.3, ln.54].

5.   With respect to claim 2, Sherer further teaches d) dropping [i.e. discarded] said packet if said address is not authorized [col.4, lns.59-60].

6.   With respect to claim 3, Sherer further teaches receiving said packet from a device coupled to said first port [col.5, lns.4-20], said first port being a switch port [10 of fig.1], and wherein there is a one-to-one mapping between ports of devices in said network and ports of switches in said network [col.5, lns.20-32].

7.   With respect to claim 4, Sherer further teaches forwarding said packet to a device if said address is authorized for said first port, said first port coupled to said device, and wherein said network comprises a virtually-wired switching fabric [col.7, lns.60-65].

8.   With respect to claim 10, Sherer further teaches comprising: d) determining changes in physical topology of said network [col.7, lns.2-32].

9.   With respect to claim 11, Sherer further teaches wherein d) comprises comparing

a physical description of said network with a stored physical description of said network

[col.7, lns.34-65].

10.   With respect to claim 12, Sherer further teaches said address is a media access

control (MAC) address [col.7, lns.27-51].

11.   Claims 31-34 are rejected under 35 U.S.C. 102(b) as being anticipated by

Holloway et al., U.S. Patent No. 5,905,859 (hereinafter Holloway).

12.   With respect to claim 31, Holloway teaches a network comprising: a plurality

switches [fig.1 i.e. router, hug, bridge]; said switches interconnected and configured to

control communication between a plurality of devices [i.e. workstation, filer server]

coupled to said network [fig.1]; and a first switch of said plurality configured to detect a

packet having an unauthorized media access control (MAC) address [col.2, ln.50 –

col.3, ln.60].

13.   With respect to claim 32, Holloway further teaches said first switch is further

configured to forward said packet if said address is authorized [col.7, lns.4-48].

14.   With respect to claim 33, Holloway further teaches said first switch is further

configured to drop said packet if said address is not authorized [col.3, lns.1-10].

15.   With respect to claim 34, Holloway further teaches there is a one-to-one mapping

between ports of said switches and ports of said devices [col.7, lns.4-10].

Claim Rejections - 35 USC § 103

16.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

17.   Claims 5-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Sherer as applied to claim 1 above, and further in view of Burgess et al., U.S. Patent

Application Publication No. 2001/0012296 (hereinafter Burgess).

18.   With respect to claim 5, Sherer is silent on step d) comparing a set of learned

addresses against a set of expected addresses, said learned addresses comprising

addresses associated with packets received at a second port, said expected addresses

derived from an expected configuration of said network.

In a method of managing a network, Burgess discloses the step d) comparing a

set of learned addresses against a set of expected addresses, said learned addresses

comprising addresses associated with packets received at a second port [i.e. blocked],

said expected addresses derived from an expected configuration of said network [figs.1-6 and paragraphs 0047-0059].

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify Sherer in view of Burgess by comparing a set of learned addresses against a set of expected address because this feature provides security against unauthorized or undesirable access to a network [Burgess, paragraph 0007]. It is for this reason that one of ordinary skill in the art at the time of the invention would have been motivated to modify Sherer in view of Burgess in order to inhibit the sending or reception of messages by an intruder except to specified devices in the network [Burgess, paragraph 0011].

19.   With respect to claim 6, Sherer further teaches said second port couples two switches in a virtually-wired switching fabric [col.7, lns.60-65].

29.   With respect to claim 7, Sherer further teaches e) tracing a topology [i.e. monitoring the link] of said network to find a third port where an unexpected address [i.e. disconnected from the port] entered said virtually-wired switching fabric [col.6, lns.57-65 and col.7, lns.60-65].

21.   With respect to claim 8, Sherer further teaches f) taking corrective action [i.e. auto-negotiation protocol] at said third port, said third port coupled to a device [col.6, lns.45-57].

22.   With respect to claim 9, Sherer further teaches disabling [i.e. unauthenticated or

deleted from the table] said third port [col.6, lns.57-65].

23.   Claims 13-18 and 20-30 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Sherer et al., U.S. Patent No. 6,115,376 (hereinafter Sherer), in view

of Burgess et al., U.S. Patent Application Publication No. 2001/0012296 (hereinafter

Burgess).

24.   With respect to claims 13 and 22, Sherer teaches computer-readable medium

having stored thereon a program, which when run on a processor, performs a method of

managing a network [see abstract and figs.1-4], said method comprising:

        a)   comparing addresses associated with packets received at a first port in

said network with expected addresses for said first port to determine unexpected

addresses [col.4, ln.36 – col.5, ln.31]; and

        However, Sherer is silent on step b) locating a second port in said network that is

a source of an unexpected address if said unexpected address is detected.

        In a method of managing a network, Burgess discloses the step b) locating a

second port [i.e. blocked] in said network that is a source of an unexpected address if

said unexpected address is detected [figs.1-6 and paragraphs 0047-0059].

        Therefore, it would have been obvious to one of ordinary skill in the art at the

time of the invention was made to modify Sherer in view of Burgess by comparing a set

of learned addresses against a set of expected address because this feature provides

security against unauthorized or undesirable access to a network [Burgess, paragraph

0007]. It is for this reason that one of ordinary skill in the art at the time of the invention

would have been motivated to modify Sherer in view of Burgess in order to inhibit the

sending or reception of messages by an intruder except to specified devices in the

network [Burgess, paragraph 0011].

25.   With respect to claim 14, Sherer further teaches said network is a virtually-wired

switching [10] network and said first port couples switches [16 i.e. internet or intranet] in

said network and said second port is coupled to a host device [11-15 i.e. end station]

[fig.1].

26.   With respect to claims 15 and 23, Sherer further teaches the step b) of said

method comprises tracing a topology [i.e. monitoring the link] of said network to

determine said second port, wherein said network comprises a virtually-wired switching

fabric and said second port is at the edge of said fabric [col.6, lns.57-65 and col.7,

lns.60-65].

27.   With respect to claim 16, Sherer further teaches said method further comprises:

c) taking corrective action [i.e. auto-negotiation protocol] at said second port, wherein

said second port is coupled to a host device [col.6, lns.45-65].

28.   With respect to claims 17 and 24, Sherer is silent on disabling said second port,

wherein said network is a virtually-wired switching fabric and said second port is at the

edge of said fabric.

In a method of managing a network, Burgess discloses further teaches said

method further comprises: c) disabling [i.e. blocked] said second port, wherein said

network is a virtually-wired switching fabric and said second port is at the edge of said

fabric [paragraphs 0047-0059].

Therefore, it would have been obvious to one of ordinary skill in the art at the

time of the invention was made to modify Sherer in view of Burgess by disabling said

second port because this feature provides security against unauthorized or undesirable

access to a network [Burgess, paragraph 0007]. It is for this reason that one of ordinary

skill in the art at the time of the invention would have been motivated to modify Sherer in

view of Burgess in order to inhibit the sending or reception of messages by an intruder

except to specified devices in the network [Burgess, paragraph 0011].

29.   With respect to claims 18 and 26, Sherer is silent on reading a bridge table.

In a method of managing a network, Burgess discloses reading a bridge table

[i.e. forwarding table] to determine learned addresses at said first port [figs. 1, 3, and 5].

Therefore, it would have been obvious to one of ordinary skill in the art at the

time of the invention was made to modify Sherer in view of Burgess by reading a bridge

table because this feature provides security against unauthorized or undesirable access

to a network [Burgess, paragraph 0007]. It is for this reason that one of ordinary skill in

the art at the time of the invention would have been motivated to modify Sherer in view

of Burgess in order to inhibit the sending or reception of messages by an intruder

except to specified devices in the network [Burgess, paragraph 0011].

30.   With respect to claim 20, Sherer further teaches said method further comprises:

c) determining changes in physical topology of said network [col.7, lns.2-32].

31.   With respect to claim 21, c) of said method comprises comparing a physical

description of said network with a stored physical description of said network [col.7,

lns.34-65].

32.   With respect to claim 25, Sherer futher teaches the step d) dropping [i.e.

discarded] said packet if said address is not authorized [col.4, lns.59-60].

33.   With respect to claim 27, Sherer further teaches the step b) further comprises

forwarding said packet to a host device if said address is authorized for said first port,

said first port coupled to said host device [col.7, lns.60-65].

34.   With respect to claim 28, Sherer further teaches the step d) determining changes

in physical topology of said network [col.7, lns.2-32].

35.   With respect to claim 29, Sherer further teaches the step d) comprises comparing

a physical description of said network with a stored physical description of said network

[col.7, lns.34-65].

36.   With respect to claim 30, Sherer further teaches said address is a media access

control (MAC) address and wherein said network comprises a virtually-wired switching

fabric [col.7, lns.27-51].

37.   Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over both

Sherer and Burgess as applied to claim 13 above, and further in view of Legal

Precedent.

38.   With respect to claim 19, both Sherer and Burgess teach a switch. However,

both Sherer and Burgess are silent on a plurality of switches. It would have been

obvious to one of ordinary skill in the art at the time of the invention was made to modify

both Sherer and Burgess, and further in view of Legal Precedent by adding the

limitation "multiple" because the limitation "multiple" is disclosed by In re Harza (Legal

Precedent for duplication), 24 F.2d 669, 124 USPQ 378, 380 (CCPA 1960) which states

"It is well settled that the mere duplication of parts has no patentable significance unless

a new and unexpected result is produce". See MPEP 2144.04 (VI)(B). In this claim,

duplicating the part does not produce any new result and does not produce any

unexpected result.

Conclusion

39.   The prior art made of record and not relied upon is considered pertinent to

applicant's disclosure.

    a.   "Managed network device security method and apparatus," by Holloway et

al., U.S. Patent No. 5,905,859.

    b.   "Parallel intrusion diction sensor with load balancing for high speed

networks," by Shanklin et al., U.S. Patent No. 6,578,147.

    c.   "Synchronizing service instruction among forwarding agent using a service

manager," by Albert et al., U.S. Patent No. 6,606,315.

    d.   "Method and apparatus for preventing unauthorized access by a network

device," by Blumenau et al., U.S. Patent Application Publication No. 2002/0083339.

    e.   "Rule based IP data processing," by Kloth, U.S. Patent No. 6,598,034.

    f.   "Network device wit unified management," by Whitmire et al., U.S. Patent

No. 6,243,756.

40.   Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Nghi V Tran whose telephone number is (571) 272-

4067. The examiner can normally be reached on Monday-Friday.

    If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Zarni Maung can be reached on (571) 272-3939. The fax phone number for

the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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